II. REMARKS

A. Status of the Claims

Claims 1-20 and 28-30 are currently pending. Claims 21-23, and 25 have been cancelled without prejudice by virtue of this amendment. Claims 24, 26-27 and 31-42 were previously cancelled.

B. Double Patenting

In the Office Action, claims 1-6, 9-20 and 28 were rejected for double patenting under 35 U.S.C. §101 "as claiming the same invention as that of claims 1-21 of prior U.S. Patent No. 6,790,459."

This rejection is traversed. Initially, it is noted that the claims of U.S. Patent No. 6,790,459 are method claims and the claims of the present application are directed to controlled release oral dosage forms.

Further, claim 1 of U.S. Patent No. 6,790,459 directed to a method for lowering blood glucose levels in human patients . . . comprising orally administering at least one oral controlled release dosage form comprising an effective dose of metformin or pharmaceutically acceptable salt thereof . . . which provides a mean provides a mean AUC_{0-24} of 22590 ± 3626 ng·hr/ml and a mean C_{max} of 2435 ± 630 ng/ml on the first day of administration and a mean AUC_{0-24} of 24136 ± 7996 ng·hr/ml and a mean C_{max} of 2288 ± 736 ng/ml on the 14th day of administration, for administration of a 2000 mg once-a-day dose of metformin.

In contrast, the present claims do not recite a mean AUC_{0-24} and a mean C_{max} of on the 14th day of administration.

The Examiner is reminded that the test for double patenting under 35 U.S.C. §101 is "whether a claim in the application could be literally infringed without literally infringing a

corresponding claim in the patent." (See MPEP, 8th Ed. 2nd Revision, §804, citing *In re Vogel*, 422 F.2d 438 (CCPA 1970)).

In applying the above test, Applicants submit that administering a dosage form that provides a mean AUC_{0-24} **other than** 24136 ± 7996 ng·hr/ml and/or a mean C_{max} other than 2288 ± 736 ng/ml on the 14th day of administration for administration of a 2000 mg once-a-day dose of metformin could literally infringe claim 1 of the present application but would not literally infringe the method of claim 1 of U.S. Patent No. 6,790,459.

In view of the above, Applicants respectfully request that this rejection be removed.

C. Claim Rejections Under 35 U.S.C. § 112

In the Office Action, claims 21-23 were rejected under 35 U.S.C. §112, second paragraph, "as being indefinite". The Office Action stated that "[t]he claims are drawn to a controlled release oral dosage form as described in Figures 1-3. However claims must stand alone and be fully described in and of themselves. Correction is required to overcome this rejection."

In response, claims 21-23 have been cancelled. Therefore, this rejection under 35 U.S.C. §112, second paragraph is now moot.

D. Claim Rejections Under 35 U.S.C. § 103

In the Office Action, claims 1-20, 25, and 28-30 were rejected under 35 U.S.C. §103(a) "as being unpatentable over the combined disclosures of Whitcomb (USPN 6,011,049 hereafter '049) and Byrd et al (USPN 6,191,162 hereafter '162)".

This rejection is traversed. Initially it is noted that independent claim 1 is directed in part to a controlled release oral dosage form for the reduction of serum glucose levels in human patients wherein the dose form comprises an effective dose of at least one suitable antihyperglycemic drug or a pharmaceutically acceptable salt thereof and a controlled release

carrier. Contrary to the statement in the Office Action, the claims are not limited to a controlled release formulation comprising metformin where the dosage form comprises a membrane coating.

It is respectfully submitted that the combination of Whitcomb and Byrd et al. fails in the very least to teach or suggest a controlled release oral dosage form which is suitable for providing once-a-day oral administration of an antihyperglycemic drug or a pharmaceutically acceptable salt thereof which provides a maximum plasma concentration (T_{max}) of the drug from 5.5 to 7.5 hours after administration following dinner.

It is respectfully submitted that Whitcomb only incidentally mentions a "controlled release formulation" at column 4, lines 35-38 and a "slow release form" at column 5, lines 30-34 of Whitcomb. Whitcomb fails to teach how such formulations are made, whether such formulations are suitable for providing once-a-day oral administration of an antihyperglycemic drug, and whether such formulations provide a mean Tmax as recited in claim 1. One of ordinary skill in the art would not arrive at the claimed limitations from the information (or lack thereof) provided in Whitcomb.

Further, it is respectfully submitted that Byrd et al (USPN 6,191,162 hereafter '162) fails to cure the deficiencies of Whitcomb. At column 8, lines 40-45 Byrd et al. describes the administration of lipoic acid with metformin (an antihyperglycemic of the present invention), and states that "it is preferable to administer metformin (particularly metformin Hydrochloride tablets sold as Glucophage®) with controlled release lipoic acid formulations of the invention." See col. 8, lines 40-45 of Byrd et al. In view of this statement in Byrd et al. it is respectfully submitted that one of ordinary skill in the art would only be motivated to include the lipoic acid described in Byrd et al. in a controlled release form and not an antihyperglycemic drug such as metformin, as Glucophage® is an immediate release tablet.

Therefore, it is respectfully submitted that in view of the combination of Whitcomb and Byrd et al., one of ordinary skill in the art would not be motivated to formulate a controlled

release oral dosage form which is suitable for providing once-a-day oral administration of an antihyperglycemic drug or a pharmaceutically acceptable salt thereof which provides a maximum plasma concentration (T_{max}) of the drug from 5.5 to 7.5 hours after administration following dinner as recited in present claim 1.

In view of the above, Applicants respectfully request withdrawal of this rejection.

III. CONCLUSION

In view of the above amendments, it is believed that all claims are now in condition for allowance. An early and favorable action is earnestly solicited.

Respectfully submitted,
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